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Application No. 10/697,664  
Amendment dated October 30, 2006  
Reply to Office Action of April 28, 2006

OCT 30 2006

REMARKS

Applicant amended claims 1, 23 and 30, and added new claims 37-39 to further define Applicant's invention.

In the Office Action and as indicated in the supplemental Communication dated May 17, 2006, the Examiner rejected claims 1-7 and 23-36 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,311,761 to Steininger et al.

The Examiner stated that Steininger et al. substantially showed the invention as claimed and, In particular, directed the Applicant to see figure 2, the combination of body 15 and fitting 37, which the Examiner considered to be the adapter. The Examiner acknowledged that Steininger et al. does not disclose that the adapter is made of beryllium copper. Steininger et al. discloses that the cup shaped piston head is preferably made of beryllium copper alloy. The Examiner asserts that it would have been obvious to make each part of the piston including the adapter with the same material.

Applicant submits that it would not have been obvious to one of ordinary skill in the art to make an adapter from beryllium copper alloy based on the teaching or suggestion of Steininger et al. because an adapter as shown in figure 2 of Steininger et al. is configured to swivel or pivot to allow the piston to follow the bore of the shot sleeve. As such, Applicant respectfully submits that the adapter of Steininger et al. would encounter significant forces and pressures that would lead one to make the adapter out of a material such as forged steel.

Nonetheless, to expedite prosecution of the present application Applicant has amended independent claims 1 and 30 to recite "said adapter being configured to maintain the plunger tip and the plunger rod in fixed relationship to one another and to said adapter" and has amended claim 23 to recite "an opposite proximal end adapted to cooperatively engage the plunger rod to maintain said adapter and the plunger rod in fixed relationship to one another" and "said adapter being configured to maintain the plunger tip and the plunger rod in fixed relationship to one another."

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Applicant respectfully submits that the Steininger et al. adapter of figure 2 is not configured to maintain the plunger tip and the plunger rod in fixed relationship to one another and to the adapter. To the contrary, Steininger et al. discloses that "the body 15 with head 17 thereon ( attached to the forward end of the plunger rod 3) is articulated on fitting 37 by means of the ball and socket mount for self-alignment thereof in the shot sleeve 5 (stated another way, for misalignment correction)." (See Steininger et al., col. 4, lines 34-38). Applicant submits that Steininger et al. does not teach or suggest an adapter as recited in Applicant's independent claims 1, 23, and 30.

Applicant submits that independent claims 1, 23, and 30 are patentable and that dependent claims 2-7, 24-29, and 31-39 dependent from independent claim 1, 23, 30, or claims dependent therefrom, are patentable at least due to their dependency from an allowable independent claim.

In view of the foregoing remarks, it is respectfully submitted that the claims, as amended, are patentable. Therefore, it is requested that the Examiner reconsider the outstanding rejections in view of the preceding comments. Issuance of a timely Notice of Allowance of the claims is earnestly solicited.

To the extent any extension of time under 37 C.F.R. § 1.136 is required to obtain entry of this reply, such extension is hereby respectfully requested. If there are any fees due under 37 C.F.R. §§ 1.16 or 1.17 which are not enclosed herewith, including any fees required for an extension of time under 37 C.F.R. § 1.136, please charge such fees to our Deposit Account No. 50-1068.

Respectfully submitted,  
MARTIN & FERRARO, LLP

Dated: October 30, 2006

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